

TDMS

DATA EVALUATION RECORD

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CASE GS _____

NAPTHALENE ACETIC ACID

PM _____ / /

CHEM 056002

NAPTHALENE ACETIC ACID

BRANCH EEB

DISC _____

FORMULATION Technical

FICHE/MASTER ID 54

CITATION: Truslow Farms (1976) Acute Oral LD₅₀ - Mallard Ducks Project
113-124 May 27, 1976

SUBST. CLASS=

OTHER SUBJECT DESCRIPTORS

PRIM:

DIRECT REVIEW TIME = 1 hr (MH) START DATE 2/12/81 END DATE 2/12/81

REVIEWED BY: Thomas B. Johnston

TITLE: Fisheries Biologist

ORG: EEB/HED

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SIGNATURE: *Thomas B. Johnston* DATE: 2/26/81

APPROVED BY:

TITLE:

ORG:

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SIGNATURE:

DATE:



2003820

FICHE/MASTER ID 54

CONCLUSIONS : This study is scientifically sound. Immature ducks were used, and were not observed for the full 14 days required by EPA guidelines. This study does not fulfill the guideline requirements. With an LD₅₀ of 1750 mg/kg, NAA acid Technical is slightly toxic to immature ducks.

METHODS AND-MATERIALS :

- A. TEST TYPE - Avian Acute Oral LD₅₀
- B. TEST SPECIES - Mallard Duck (Anas Platyrhynchos)
- C. TEST PROCEDURES - Ten birds per level for five levels (45, 464, 1000, 2150, and 4460 mg/kg) were given single oral doses of the test substance, then observed for 8 days while on a diet free of toxicants.

STATISTICAL ANALYSIS

Monthly Data were analyzed statistically by the method of Litchfield and Wilcoxon.

REPORTED RESULTS:

The acute oral LD₅₀ of NAA Acid Technical in the Mallard Duck is 1750 mg/kg, 95% confidence limits 1337 to 2289 mg/kg.

DISCUSSION :

- A. TEST PROCEDURE: USEPA guidelines were generally followed, but for two important exceptions. Immature (14 day-old) ducks were instead of 16-week-old ducks, and the birds were observed for only 8 days instead of 14.
- B. STATISTICAL ANALYSIS: Mortality data were analyzed by the method of Litchfield and Wilcoxon.
- C. DISCUSSION/RESULTS: The EEB analysis of the data showed an LD₅₀ of 1690 mg/kg. The difference between the author's LD₅₀ value (1750 mg/kg) and EEB's was probably due to mechanical error introduced by the Litchfield and Wilcoxon method.
- D. CONCLUSION :
 - 1. CATEGORY: Supplemental
 - 2. RATIONALE : Immature (14-day-old) ducks were used, rather than the 16-week-old birds required by USEPA guidelines. The birds were observed for only 8 days after they were dosed, rather than the 14 days recommended by the guidelines.
 - 3. REPAIRABILITY: This study cannot be repaired to core.